

Visual Building Fire Escape Plan Design

Visual Building - Fire Escape Plan Design

INDEMNITY

This document and associated software has been produced as a tool to assist you in completing various floor plans associated with a fire safety risk assessment of your premises. It is used entirely at your own risk to produce suitable plans, and also whether you consider the information therein to be suitable and sufficient. It is in no way exhaustive and Visual Building Ltd accepts no liability for any circumstances which may arise as a result of using this tool.

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1 Installing

Normally the Fire Escape Plan Catalogue is distributed as a download. You will have been sent a link which will run download and rub the Downloader:

Fire_Escape_Plan_Catalogue_Downloader.exe

This is a small program that will locate and download the larger Fire Escape Plan Catalogue install file:

Fire_Escape_Plan_Catalogue.exe

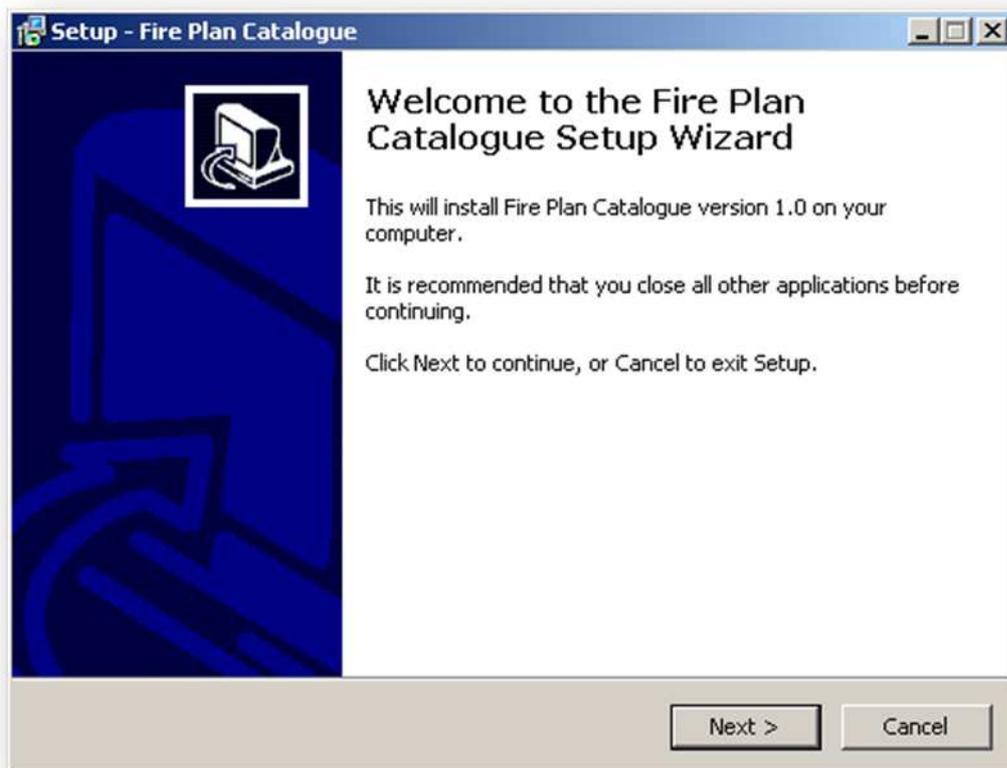
When the download is complete the install program should start automatically, however some virus checker settings may prevent this, in which you must locate and activate the installer manually.

By default the downloader program will download to:

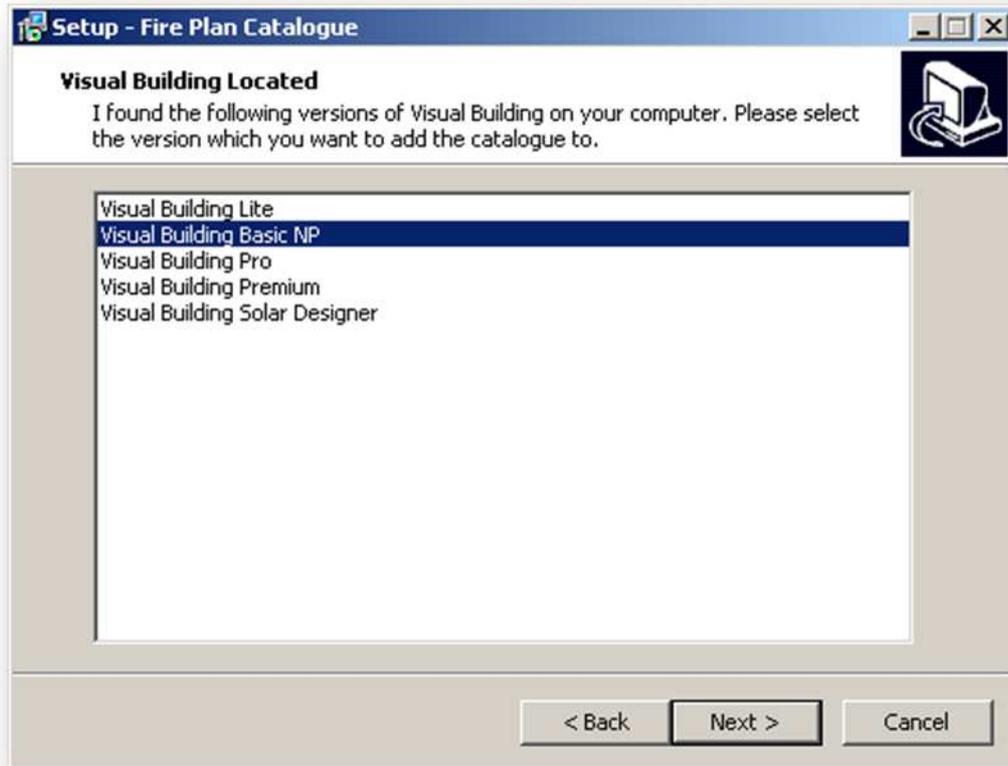
[C:\Users\YOURNAME\Downloads](#)

But it is possible that you have changed your default download settings.

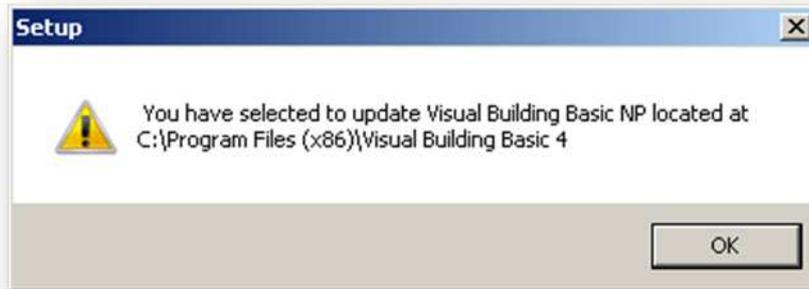
When you run the install program, you should follow the instructions in the following dialogs.



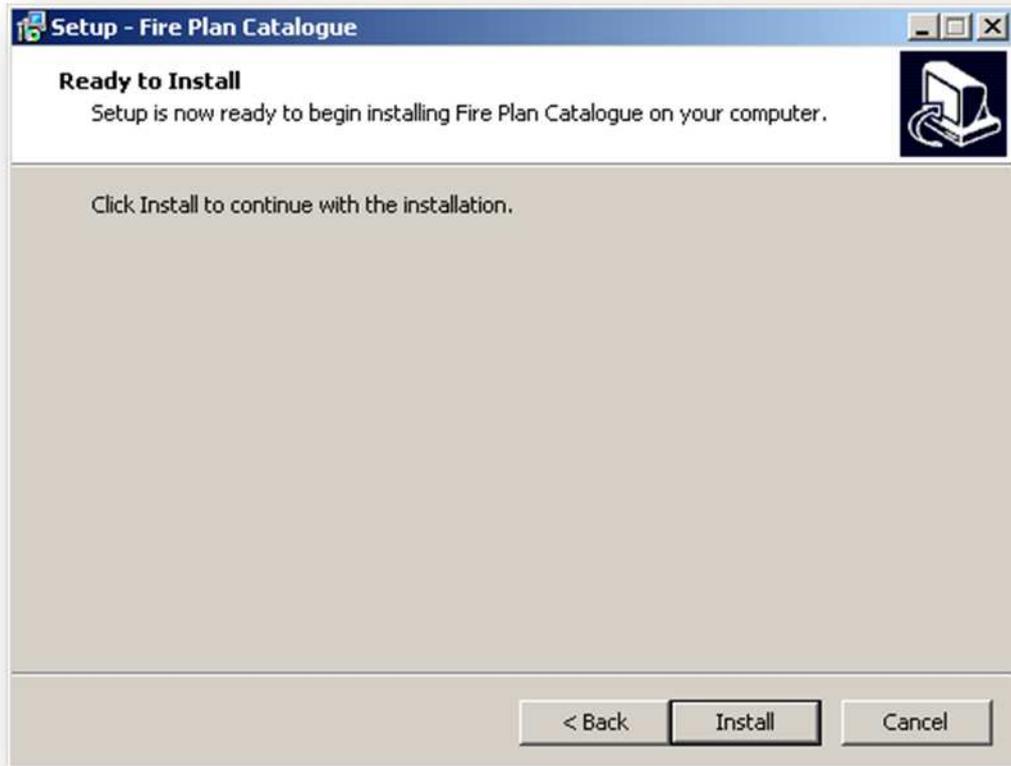
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Most users will only have one of the above programs installed and listed. Select your version and proceed with Next.



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Clicking Install will install the catalogue.



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The installer will have added a new folder called **Fire Escape** to the following path:

C:\Program Files (x86)\Visual Building Basic 4\Graphics2D

This path will vary depending upon your Windows version and Visual Building version.

The project templates that you will use are installed in a folder called **Fire Escape Plan Templates** at the following path:

C:\Program Files (x86)\Visual Building Basic 4\Projects

This path will vary depending upon your Windows version and Visual Building version.

2 Fire Escape Plans

Due to Visual Building's use of layers, it is possible to create a floor plan and use that floor plan for many different purposes. Such a floor plan can be used as the basis for a fire escape plan.

This is an additional document to Visual Building User manual, which describes in detail how to use all the features of Visual Building.



A3 1: 100 Scale Drawing based on example in BS ISO 23601:2009

The creation of a fire escape plan is a serious matter and could make the difference between life and death and we cannot emphasise enough the importance of seeking professional advice should you have any doubts in your own knowledge or ability in this subject.

This document should be read alongside the following BSI ISO standards:

BS ISO 23601:2009

BS ISO 7010:2011

Should there be any discrepancy or omissions between this document and the above standards then you should always use the data contained within the standard.

This document is intended as a quick reference guide only and neither Visual Building Ltd nor its employees can guarantee its accuracy or completeness. Legal requirements and

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standards are constantly changing and we therefore request that you refer to a competent and qualified authority and relevant standards.

3 Requirements

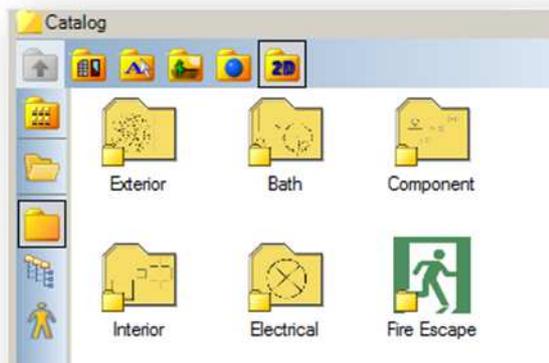
To create an Escape plan you will need the following:

Visual Building Basic (preferred, but any version of Visual Building is suitable)

Visual Building Fire Escape Plan Catalogue

3.1 Fire Escape Plan Catalogue

When installed the Fire Escape Plan catalogue will be found in the **2D Symbols** catalogue.



The Fire Escape Plan catalogue consists of the following folders:



Additional colours are easy to add as required.

3.2 Fire Escape Plan Project templates

Templates are easy to create for all combinations of paper size, orientation and scale, but we have included the most common ones within the Fire Escape Plan Catalogue.

Template name	Size	Orientation	Scale
EscapePlanTemplateA4L100	A4	Landscape	1:100
EscapePlanTemplateA4L250	A4	Landscape	1:250
EscapePlanTemplateA4L350	A4	Landscape	1:350
EscapePlanTemplateA4P100	A4	Portrait	1:100
EscapeplanTemplateA3L100	A3	Landscape	1:100
EscapeplanTemplateA3P100	A3	Portrait	1:100

These templates include the Escape Plan header set to the recommended minimum text size.

The templates also include several pre-defined layers which allow you to use the floor plans for purposes other than escape plans.

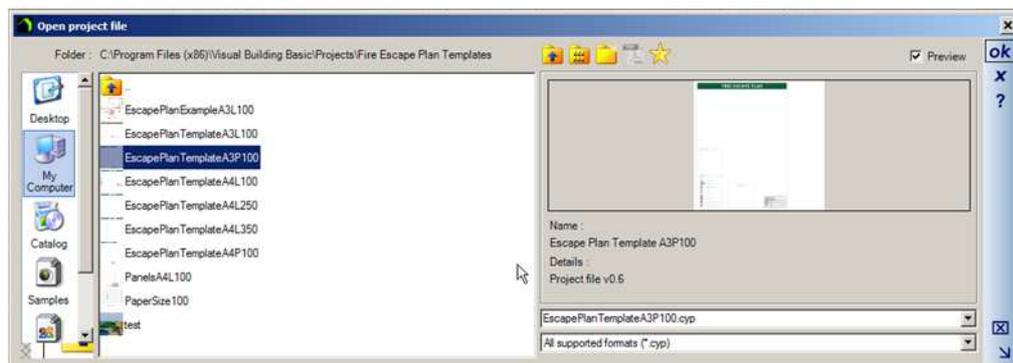
The templates are located in the Visual Building Projects folder which will have a path name similar to (depending upon your system and install options):

C:\Program Files (x86)\Visual Building Basic\Projects\Fire Escape Plan Templates

C:\Program Files\Visual Building Basic\Projects\Fire Escape Plan Templates

To open a template:

1. Select the **File** menu and then **Open**
2. Navigate to the following folder:
C:\Program Files (x86)\Visual Building Basic\Projects\Fire Escape Plan Templates



3. Select the template you require and then click on OK.
4. The template will now load

3.2.1 Areas Folder

This folder contains a set of predefined colours that you can use on any of the layers.

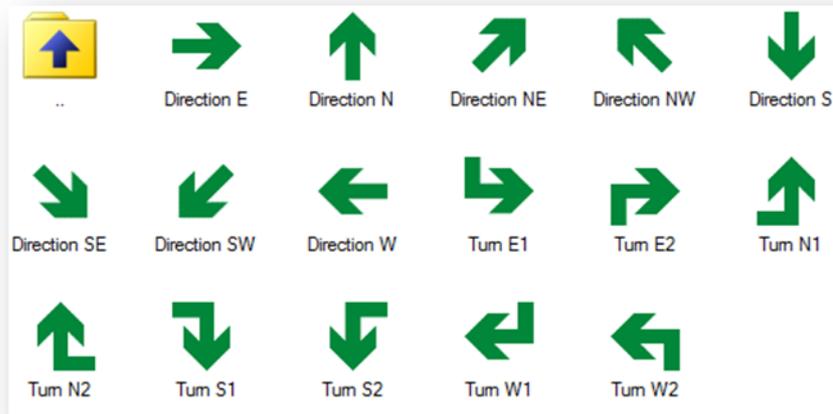


3.2.2 Directions Folder



A set of direction arrows for use on the Escape Route Plan

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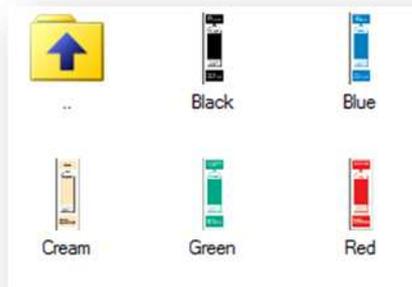


These green on transparent arrows are used to indicate emergency escape routes.

3.3 Fire Extinguisher Folder



These symbols are used on the Extinguisher plan to identify location and type of each fire extinguisher.



Note that the green label represents Halon, which is now illegal in UK

3.4 Fire Signs Folder



3.5 Frames Folder

This folder contains a set of frames that can be used to contain legends and other standard panels for the various plans. You can easily create new panels and save these into your catalogue for future use.

3.6 Information Folder

This folder includes a set of You Are Here symbols



3.7 ISO 7010 E Folder

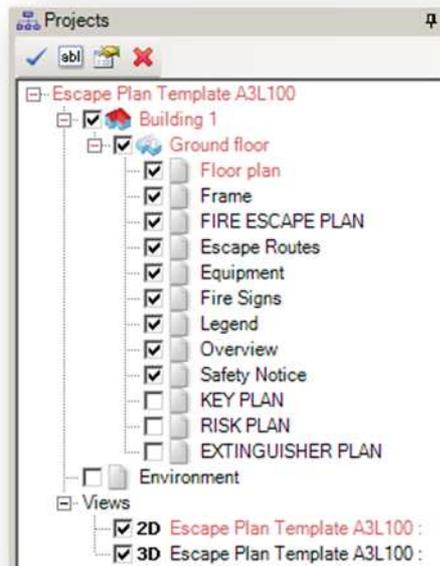


3.8 ISO 7010 F Folder



4 Overview

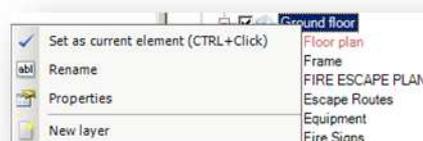
The simple concept of using Visual Building is that you draw a single floor plan of a building and superimpose layers to achieve different objects with that floor plan.



Although all layers can be visible, you can only work on a single layer at a time, which is indicated in red. You can select a new layer to work on by selecting the layer while holding the Ctrl key, or alternatively, right clicking the layer and selecting Set as current element in the activated context menu.



These layers are predefined in a set of project templates. The main purpose here is to create fire escape plans, but you can use the same floor plans for addition purposes such as Key Plans, Risk Plans and Fire Extinguisher Plans.



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You are also able to add any additional layer at any time without interfering with existing layers. To add a new layer, simply right click on the floor name, in the above example this would be Ground floor, and select **New layer**.

4.1 Layers

The templates include the following layers:

4.1.1 Floor plan

This layer is where you draw the building's walls. The wall thickness on the final printed plan should not be less than the following:

Minimum structural wall thickness: 1.6 mm

Minimum partition wall thickness: 0.6 mm

Minimum line thickness for details such as stairs and windows: 0.15 mm

To achieve this minimum thickness the actual wall sizes used in your project will vary depending upon the scale and paper size.

Note that all walls in your floor plan should be solid black lines. Cavity walls and hatched walls should not be used. The wall thickness used does not have to be a true representation of actual wall thickness, but there is a minimum requirement that must be displayed on an escape plan:

Scale	Type	Line	Wall Thickness
1:100	Structural	1.6 mm	160 mm
	Partition	0.6mm	60 mm
1:250	Structural	1.6 mm	400 mm
	Partition	0.6mm	150 mm
1:350	Structural	1.6 mm	560 mm
	Partition	0.6mm	210 mm

We suggest that you use only the External wall and Supporting wall definitions to maintain clarity of your plan. Note that these are the minimum lines / wall sizes which you can increase depending upon the complexity of your plan.

Normally you use the same floor plan for all your requirements, but it is essential that you use the above minimum line thickness for the purpose of Escape plans.

4.1.2 Frame

This is the drawings outer frame and can be used for all plan types.



4.1.3 Fire Escape Plan

The Escape Plan must have a standard header title: Escape plan. The header colour is in safety green and must not be less than 7% of the height of the printed plan height. The title text is white and must be at least 60% of the height of the header. The size of the title header therefore relates to the height of the final printed sheet and so has the following minimum settings:

Plan Size	Size (mm)	Header Height (mm)	Text Height (mm)
A3	297 x 420	21	12
A2	420 x 594	30	18
A1	594 x 841	42	26
A0	841 X 1189	59	36

Text

The minimal text height is 2mm and must be in black. Highlighted text can be in another colour.

Colours

The background colour of the Escape plan shall be white.

Safety Symbols

All safety symbol signs must have a minimum height of 7mm

Plan Information

This must show the following information:

- Designer of plan
- Facility name
- Floor
- Date and revision of plan
- Plan reference number

4.1.3.1 Escape Routes

Escape routes are highlighted in light green. Directional arrows are in safety green which gives a good contrast upon the light green. The escape routes and directional arrows are placed in the Escape Route layer. You can hide the escape route layer when using the Escape Plan floor plan for other purposes.

4.1.3.2 Equipment Layer

This is a plan of all fire fighting equipment as found in the ISO 7010 F symbol catalogue.

4.1.3.3 Fire Signs Layer

This layer displays the green safety signs as found in the ISO 7010 E symbol catalogue.

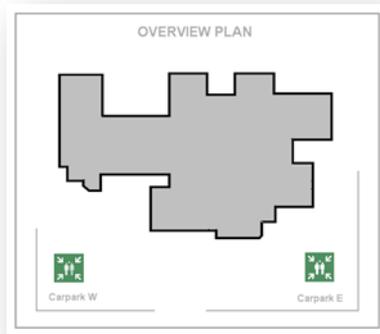
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4.1.3.4 Legend Layer

All escape plans must show a legend explaining the meaning of safety signs, graphical symbols and colour coding used on the plan.

4.1.3.5 Overview Layer

Larger premises may require an overview plan for example showing details of Evacuation Assembly points.



4.1.3.6 Safety Notice Layer

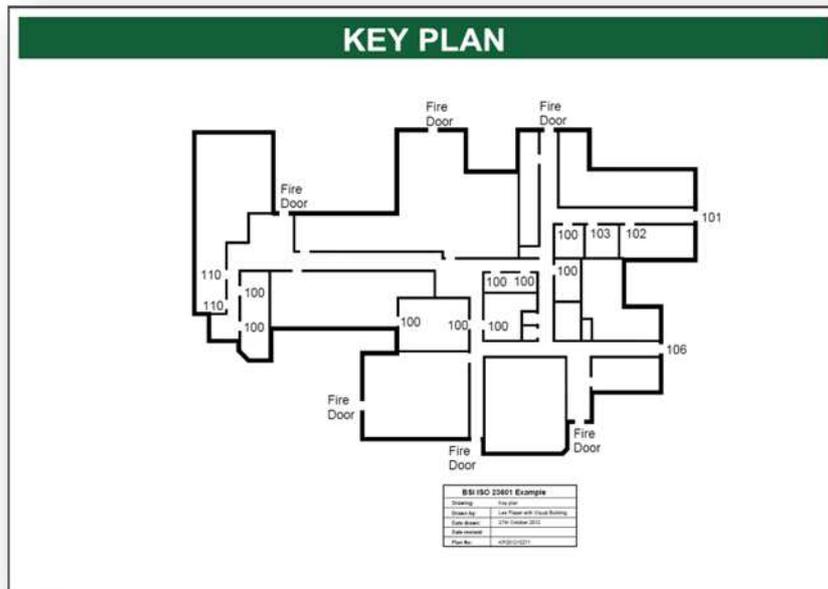
Escape plans must always be associated with fire and emergency safety notices.

4.1.4 Key Plan

This plan indicates doors and associated key numbers. The key plan indicates lockable doors and their associated keys. Fire Doors are also indicated. Additional text indicating restrictions and access can also be added.

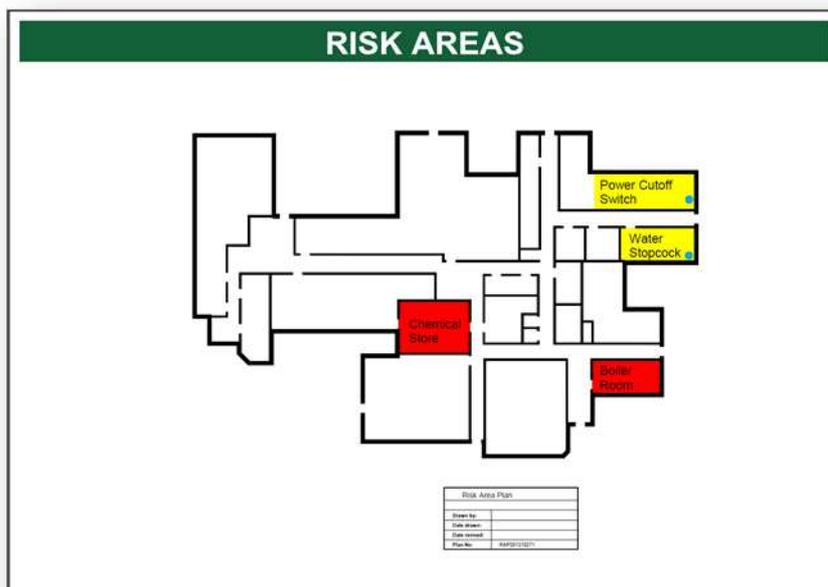
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The Key plan layer normally is an overlay to the Floor plan layer.



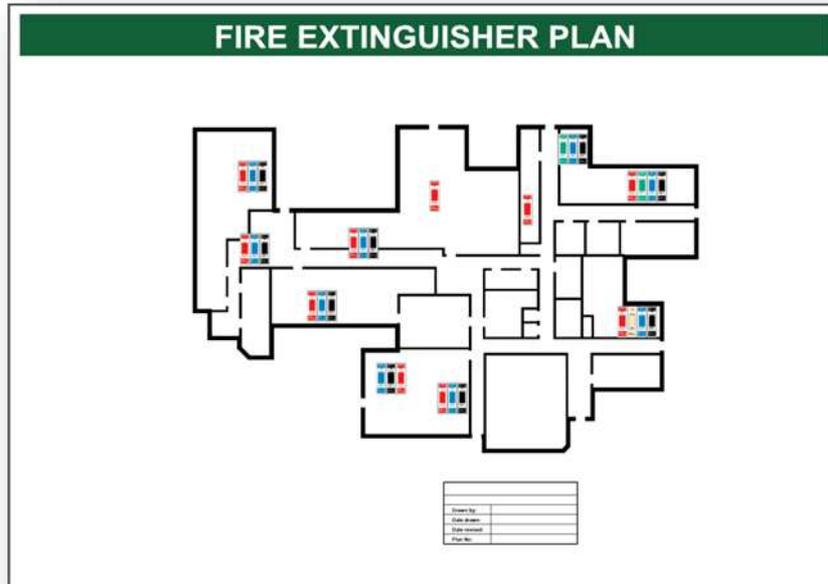
4.1.5 Risk Plan

This plan identifies any potential risks such as chemical, and inflammables storage.



4.1.6 Extinguisher Plan

The Extinguisher Plan can be used to identify the location and type of each fire extinguisher.



For colour coding for portable fire extinguishers please refer to:

BS 7863:2009 Recommendations for colour coding to indicate the extinguishing media contained in portable fire extinguishers

4.1.7 Additional Layers

You can create additional layers as required, for example:

Fire
Zone Plan
Intruder Alarm Plan

You are able to add any additional new layer at any time without interfering with existing layers. To add a new layer, simply right click on the floor name, in the above example this would be Ground floor, and select **New layer**.



4.1.8 Guidelines

Guidelines are useful during the construction of a plan but are not required in the final printed version. You can hide all guide lines within a plan using the Guide line on/off tool, or alternatively keep all guidelines on a single layer which you can also enable / disable.

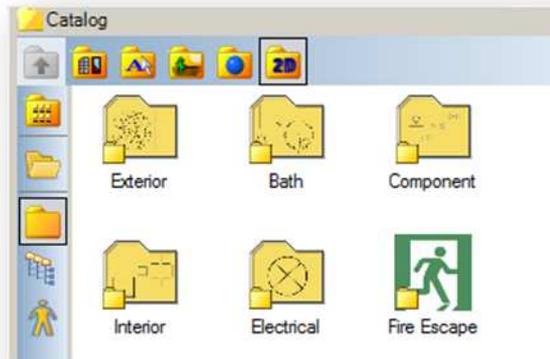
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To help you highlight the guidelines, we suggest you set your guideline colour to blue and line style to solid.

5 Create a Fire Escape Plan

5.1 Locate Fire Escape Plan Catalogue

If you cannot see the Fire Escape catalogue in the 2D Symbols folder, then you possibly don't have it installed. You will need to purchase and install the Visual Building Fire Escape Plan Catalogue.



After downloading, run the install program and after restarting Visual Building you should see it in the 2D Symbols folder.

5.2 Paper Size

The minimal paper size for an escape plan should be A3, or A4 for an escape plan situated in an individual room, such as in a hotel. The paper size that you are able to print to from Visual Building depends upon the printer that you have attached, as all information is acquired from the printer driver.

We suggest using a PDF driver as a print device. This will then allow you to create any paper size supported by the PDF driver and save the output as a PDF file.

If you require a PDF driver then you can locate a link to a download on our forum at www.visualbuilding.co.uk/forum

The required paper size will be defined by the building size and scale.

5.3 Scale

BS ISO 23601:2009 recommends that the scale used for an Escape plan is as follows:

1:250	Large facilities
1:100	Medium facilities
1:350	Plans displayed in individual rooms

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	Scale	Width mm	Height mm	Building Size	
				W m	L m
A4	10	297	210	2.97	2.10
	20	297	210	5.94	4.20
	50	297	210	14.85	10.50
	100	297	210	29.70	21.00
	150	297	210	44.55	31.50
	200	297	210	59.40	42.00
	500	297	210	148.50	105.00
A3	10	420	297	4.20	2.97
	20	420	297	8.40	5.94
	50	420	297	21.00	14.85
	100	420	297	42.00	29.70
	150	420	297	63.00	44.55
	200	420	297	84.00	59.40
	500	420	297	210.00	148.50
A2	10	590	420	5.90	4.20
	20	590	420	11.80	8.40
	50	590	420	29.50	21.00
	100	590	420	59.00	42.00
	150	590	420	88.50	63.00
	200	590	420	118.00	84.00
	500	590	420	295.00	210.00
A1	10	891	594	8.91	5.94
	20	891	594	17.82	11.88
	50	891	594	44.55	29.70
	100	891	594	89.10	59.40
	150	891	594	133.65	89.10
	200	891	594	178.20	118.80
	500	891	594	445.50	297.00
A0	10	1189	841	11.89	8.41
	20	1189	841	23.78	16.82
	50	1189	841	59.45	42.05
	100	1189	841	118.90	84.10
	150	1189	841	178.35	126.15
	200	1189	841	237.80	168.20
	500	1189	841	594.50	420.50

The following rough and ready guide will give you a quick indication of what size building will fit a A0 to A4 sheet at different scales. Note that this does not take into account any borders around a building plan.

5.4 Orientation

The plans orientation must be relative to the viewer's location.

Landscape or portrait? That depends on your building shape, but in most cases will be landscape.

5.5 Select a Template

Now that you have identified your scale, paper size and orientation you can now load a project template.

In Visual Building press **Ctrl + 0** to open a new project, and then navigate to **Samples** folder, where you should find the **Escape Plan Templates** folder. Select and load the desired template defined by paper size and scale.

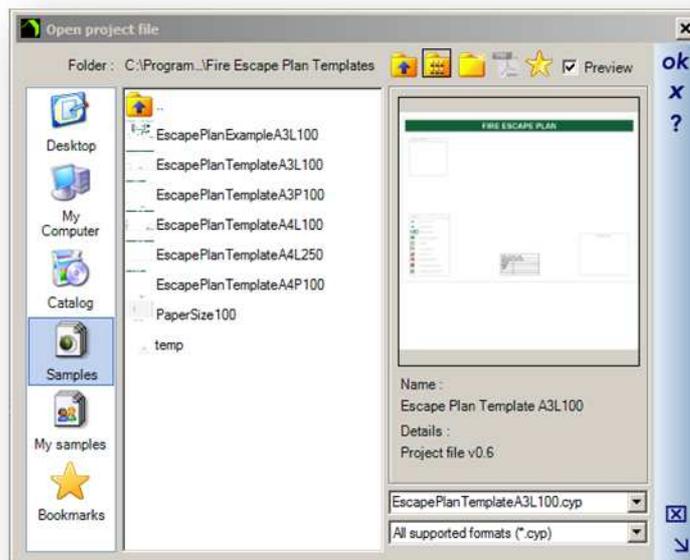
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Template name	Size	Orientation	Scale
EscapePlanTemplateA4L100	A4	Landscape	1:100
EscapePlanTemplateA4L250	A4	Landscape	1:250
EscapePlanTemplateA4L350	A4	Landscape	1:350
EscapePlanTemplateA4P100	A4	Portrait	1:100
EscapeplanTemplateA3L100	A3	Landscape	1:100
EscapeplanTemplateA3P100	A3	Portrait	1:100

Our example will be based on a building 25m x 16m, plus a car park. This is a medium sized building and so we should draw this at a scale of 1:100. Although it would fit on an A4 sheet which would allow for a building 29.7 m x 21, there would not be sufficient space for legends, assembly point diagram and safety notices, so we will choose an A3 sheet Landscape at a scale of 1:100.

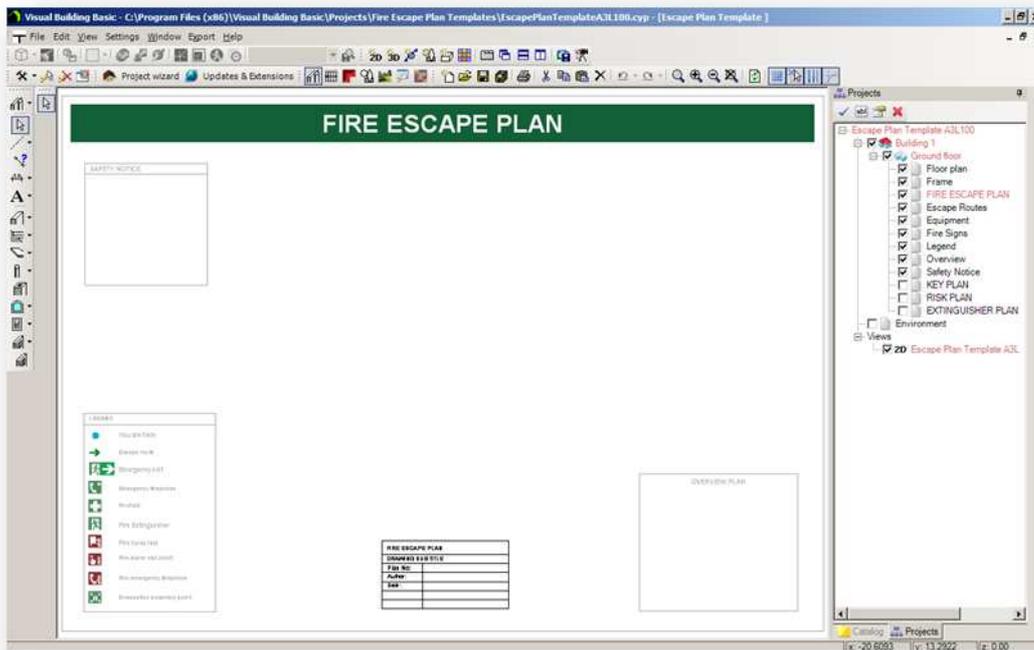
So we would choose to use template **EscapeplanTemplateA3L100**.

To load the template press Ctrl + O and in the activated Open project file dialog navigate to the **Samples folder / File Escape Plan Templates** and load the template file **EscapePlanTemplateA3L100.cyp**



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The template project will then load



:

The template consists of a building (Building 1) with a floor (Ground floor) which has 10 layers. These can be viewed in the Projects tab. Each layer is visible if ticked. Although all layers are visible only 1 layer can be edited and this is the current layer identified by being marked in red. To switch layer click the layer title while holding the Ctrl key.

To create a fire escape plan you would normally have only the layers selected as in the above image; however you can also use the same Floorplan as the basis for other plans such as a Key Plan, Risk Plan and Extinguisher Plan.

A quick overview of the layers:

5.6 Drawing the Floor plan

This layer is normally used by the Fire Escape Plan, but can also be used by any other plan that you wish to base on the same floor plan.

Disable the layers except the Floor plan and Frame layer, and ensure the Floor plan layer is the current layer.

There are minimum requirements for the wall thickness on an escape plan, irrespective of the actual real thickness of the plan, which irrespective of paper size should be 1.6 mm. (See 4.1.1). The line thickness can be greater depending upon scale, and your building size, but must be a minimum of 1.6 mm.

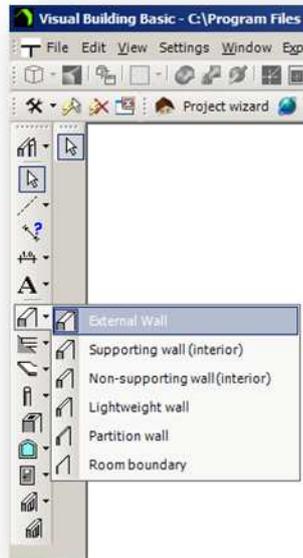
You can use the External Wall for structural walls setting the wall thickness to 160mm and Supporting walls for internal partition walls, setting the wall thickness to 60 mm.

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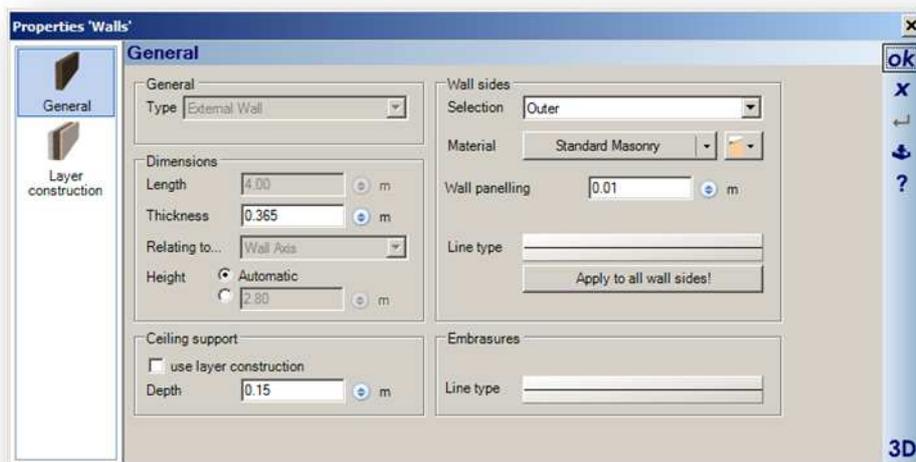
5.6.1 Setting wall thickness

To set the wall thickness

In the What toolbar, ensure you have the components tool select, which will then display wall icon.



Select the External wall to be the current wall type, and then right click on the wall icon to display the Wall properties:



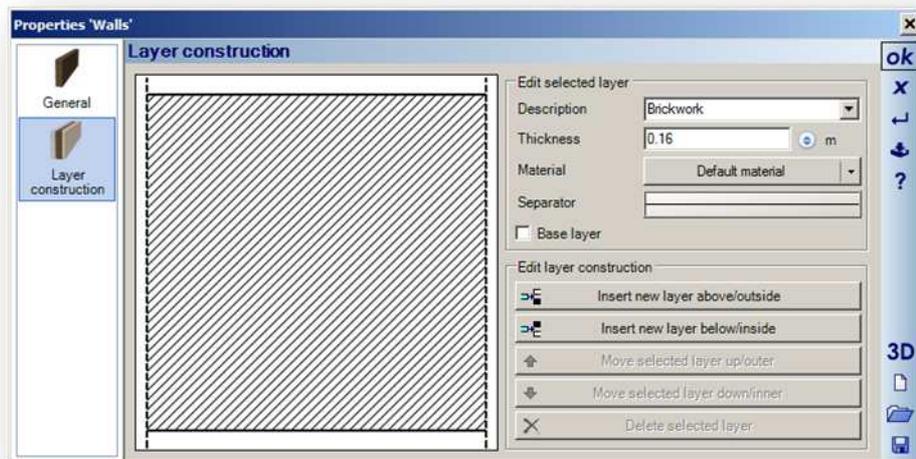
The above shows a wall thickness of 0.365m, but at 1:100 scale to achieve a 1.6mm line this should be set to 0.16m. As mentioned earlier you can use a thicker wall.

The next step is to ensure that the wall filling is solid black, as we do not want to show hatched or cavity walls on our escape plan. Select the Layer construction from the left section of the dialog to display the Layer construction tab.

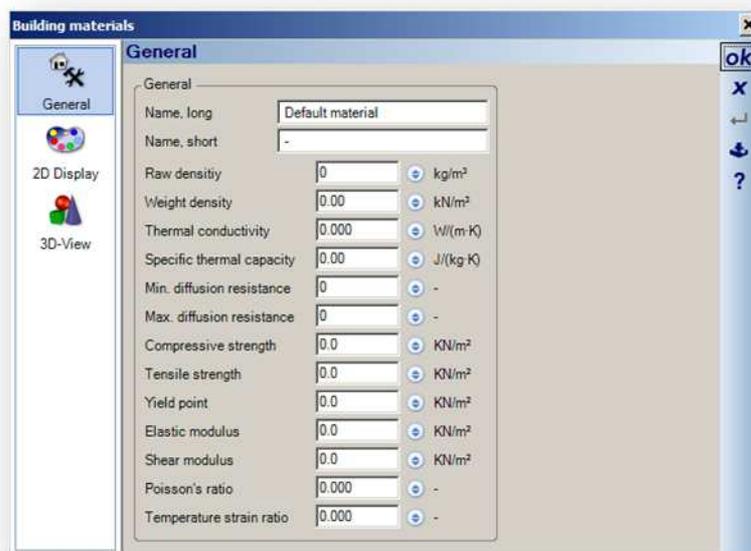
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5.6.2 Setting wall colour

If you see anything but black solid being used for the wall fill you can change it as follows:



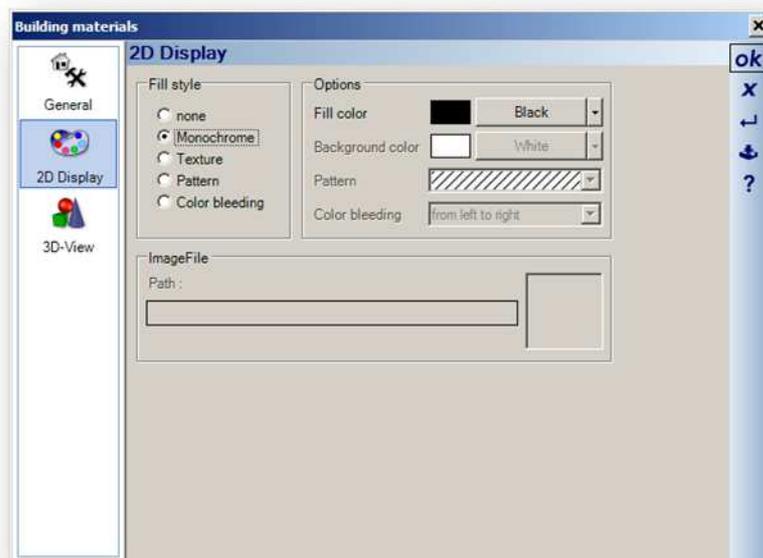
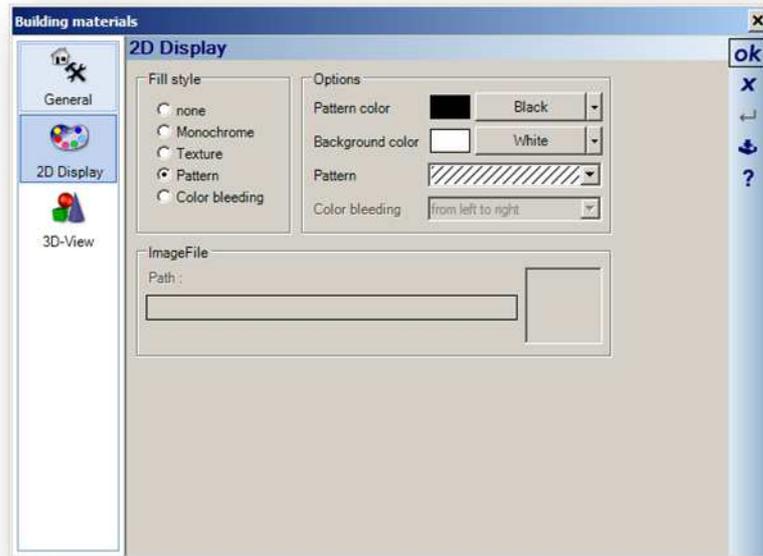
Click on Default material button, which then activates the Building materials dialog:



Then click on the 2D Display button, which activates the 2D Display dialog, where we can now select the fill style and colour of the wall. Select Monochrome and Fill colour to Black.

Click the Save as default button to record these settings for future projects.

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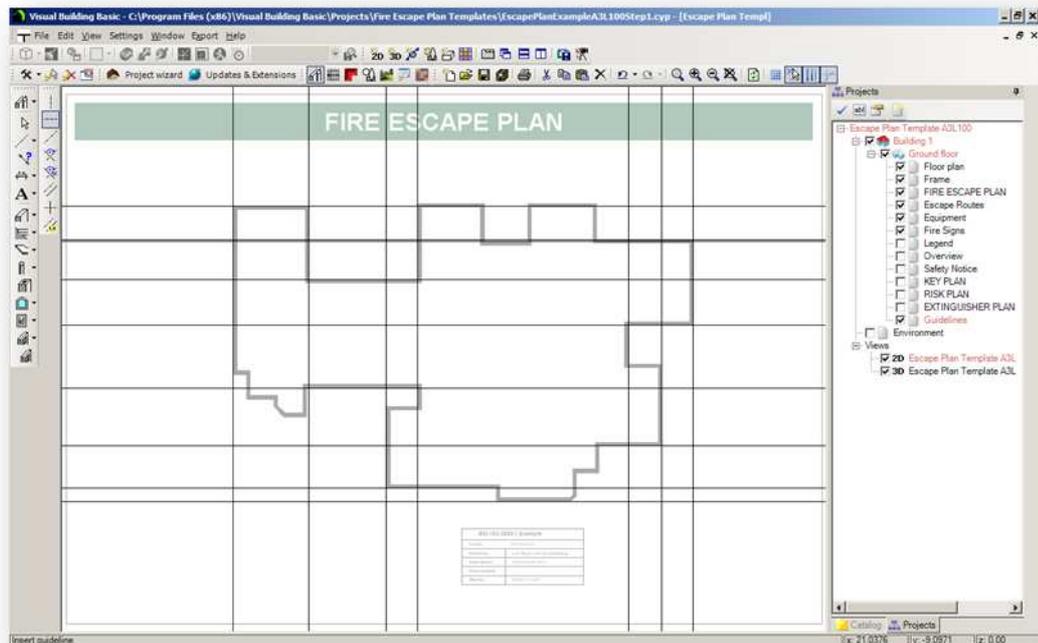
5.6.3 Draw exterior walls

Using the External Wall, draw out the exterior shape of your building. Be sure that you are drawing your walls on the Floor Plan layer. You can be exact as you wish.

You can use guide lines to plan out your plan and then place the wall along the guidelines, using **Ctrl+W** to select which wall edge will snap to the guide line.

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Alternatively you can use the grid to snap to, setting the grid size to accommodate the scale that you are working in.



To set the grid, right click on the grid icon.

There are several methods available to draw walls, and you can use the method that you feel comfortable with.

5.6.4 Draw interior walls

Next draw the interior walls, using the Supporting wall type.

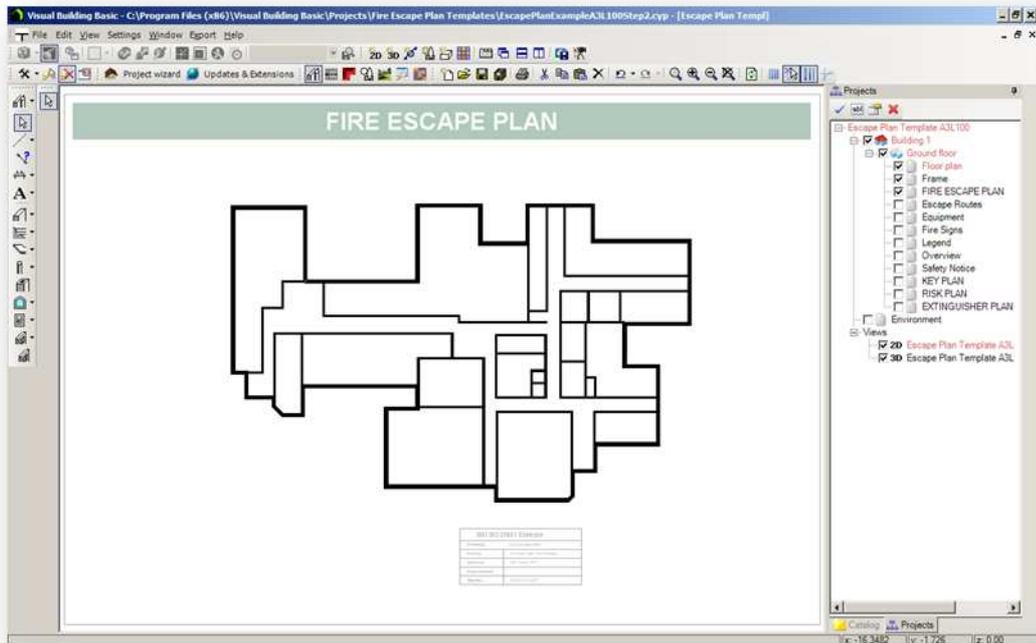
5.6.5 Position your plan

To reposition your plan on the floor plan, zoom out and drag a selection around all the walls drawn. When all the selected walls are red, you can drag them to any point on your plan, to allow for Legends, Safety notices and other detail that you may wish to include.

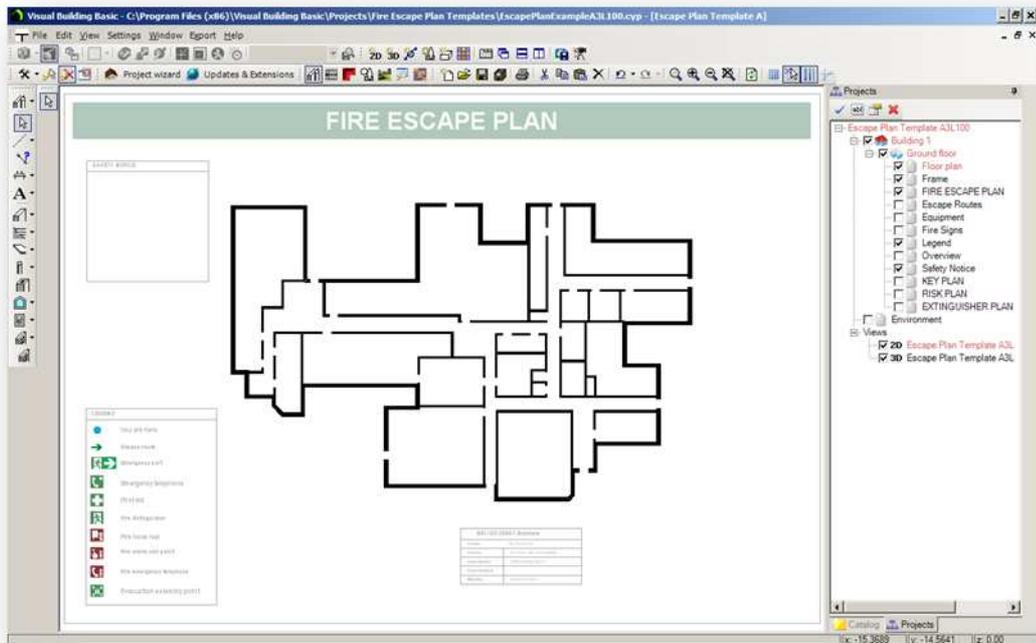
You can enable the appropriate layers with default panels to help you plan out your positioning.

5.6.6 Place Doors

In the **What toolbar**, ensure you have the components tool selected, which will then display door icon.



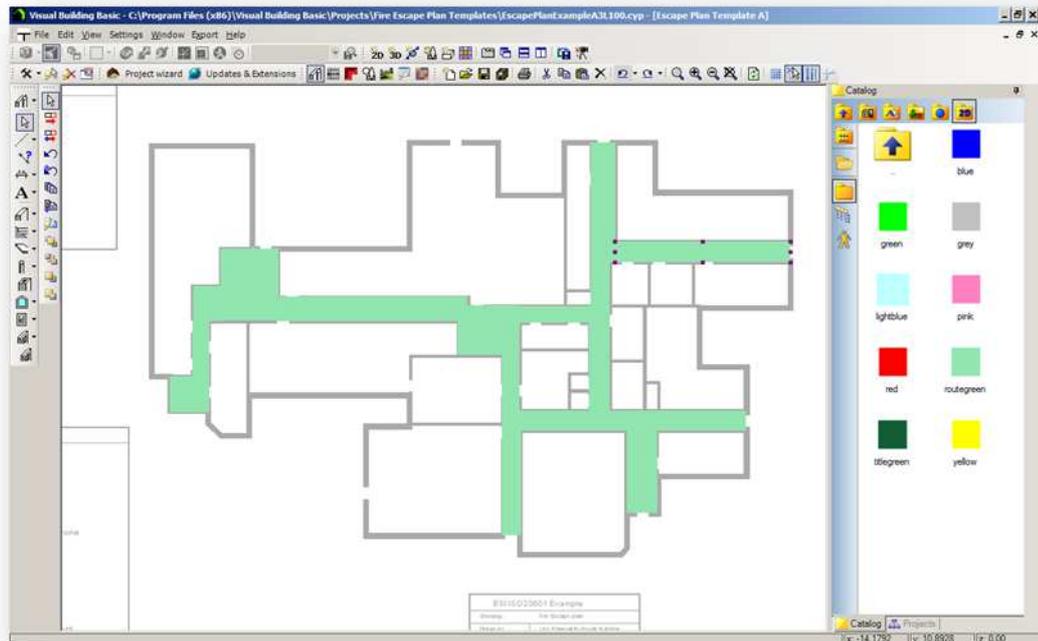
In a 2D plan doors will normally show the door sweep, or door arc, but this is best not displayed in a fire escape plan, in order to present a clear precise plan.



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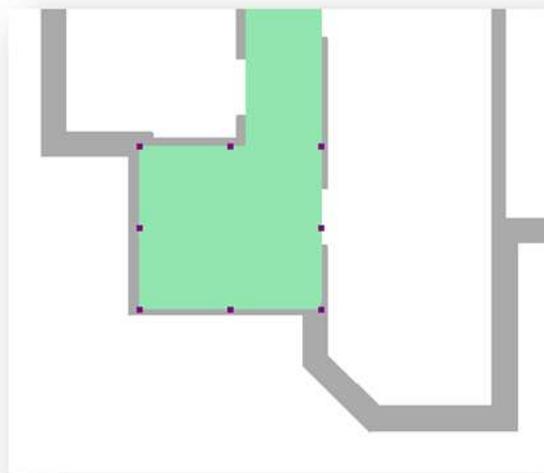
5.6.7 Place Escape Routes Area

You can now mark out the green safe areas



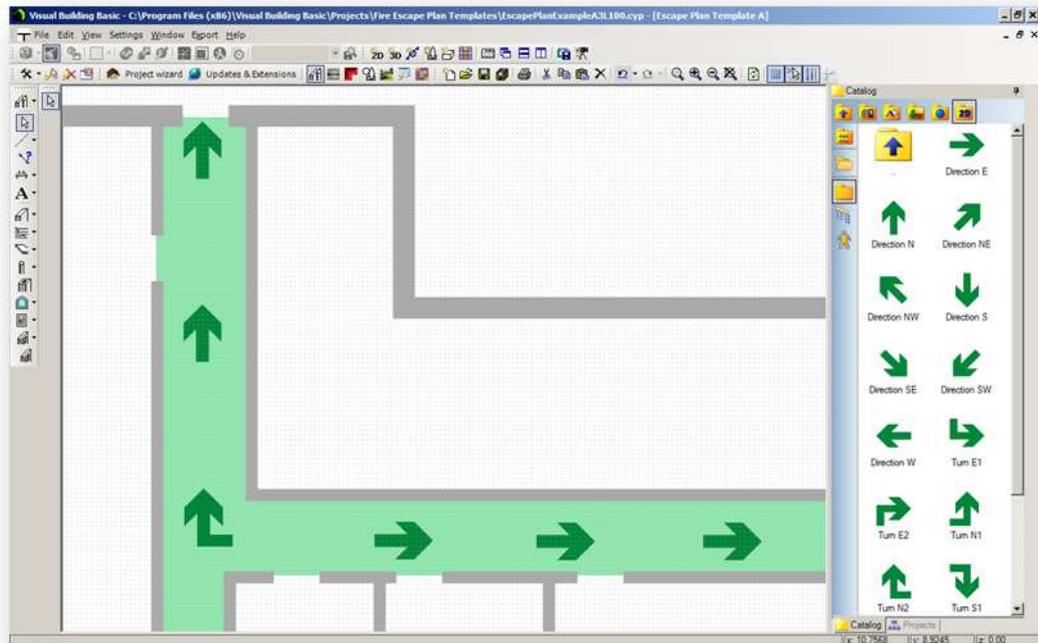
Drag the colour graphic onto the Escape route layer and align to the wall centre. When printed, you will see that the wall's floor plan layer is higher than the Escape route layer.

You can adjust the size and position of each area by clicking on the area symbols handle to select it and a second click will re position it.

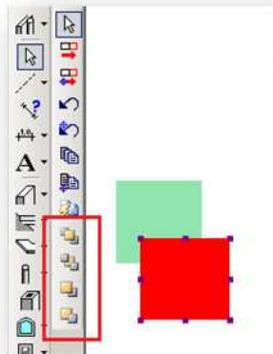


5.6.8 Place Escape Route Direction Arrows

Using symbols from ISO 7010, you can now drag the arrow icons onto the Escape route layer.



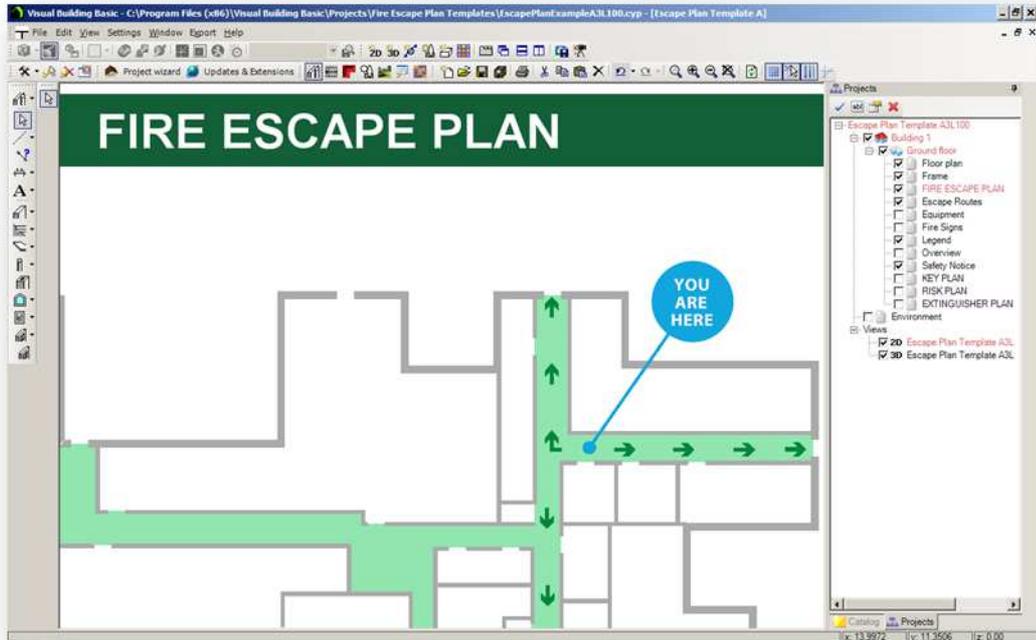
When any 2D graphic is selected you can change its order that it appears on its layer, by select **Send to Back** or **Send to Front**.



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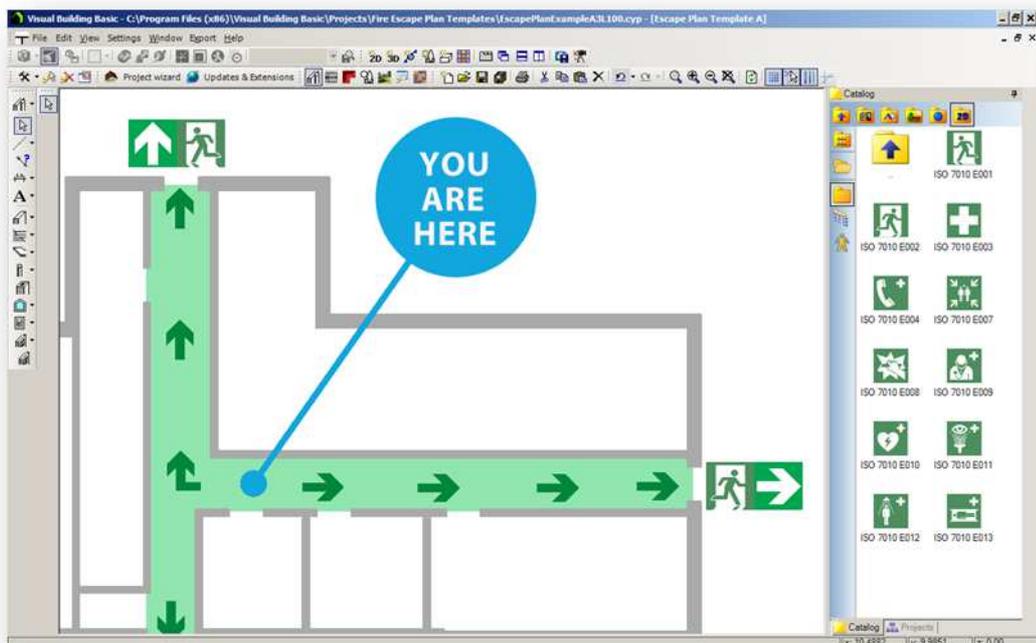
5.6.9 Place You are Here

The escape plan should be drawn relative to the viewer's orientation and location, and so it is now important to indicate to the viewer where on the plan they are located



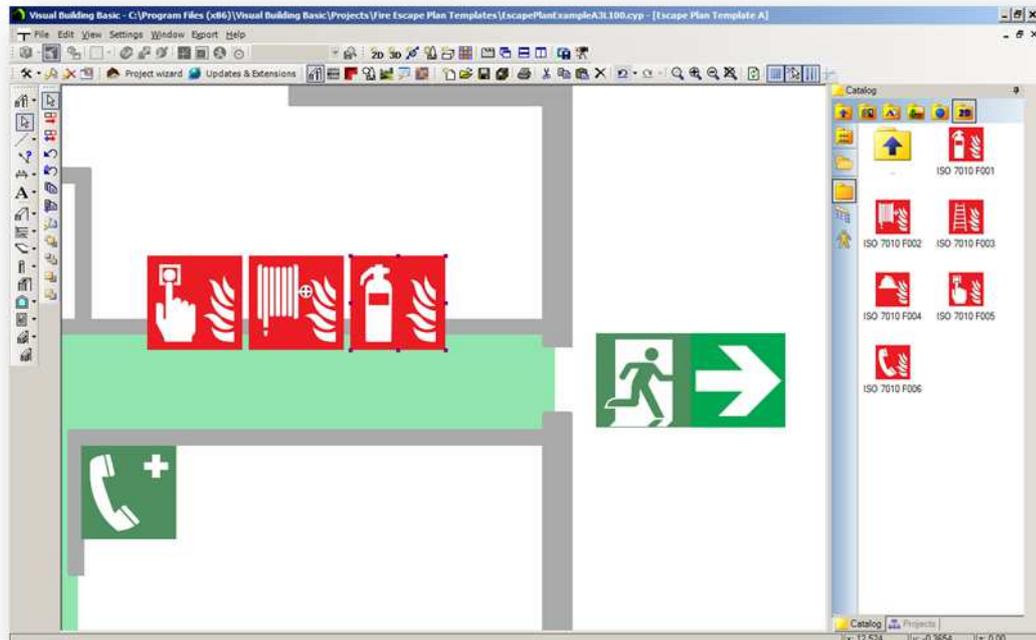
5.6.10 Place Fire Signs

Using symbols from ISO 7010, you can now drag the icons onto the Escape route layer.



5.6.11 Place Fire Fighting equipment

Using symbols from ISO 7010 you can now drag the symbols showing placement of fire fighting equipment. These symbols should be placed on the Equipment layer.



5.6.12 Place Legend

All plans will require a legend in order to identify the meaning of all icons used on the fire escape plan. You can load a default legend from the frames folder, but if you have used a different set of symbols on your plan, you will need to edit the default legend.

5.6.13 Place Overview

When you need to reference external assembly areas or indicate a buildings location within a larger complex, you can add an overview plan.

5.6.14 Place Safety Notice

You should also add a Safety notice advising the reader of precautions and actions to be taken in the event of a fire or emergency. There is an empty default Safety Notice frame located in the frame folder. You would place this on the Safety Notice layer.

5.6.15 Create a Key Plan

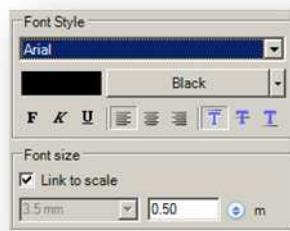
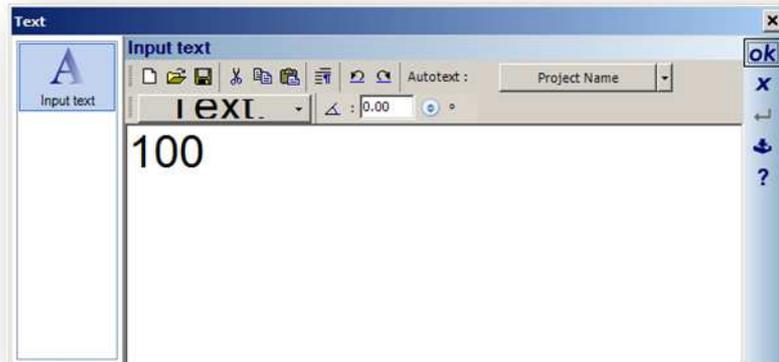
This is an optional feature and not needed to create a fire escape plan. However as you have created a floor plan for the purpose of a fire escape plan, you can now easily use that same plan to create a Key Plan.

The Key plan easily identifies the location of any key boxes and identifies key numbers against each door.

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To create the Key plan, disable all layers except the Floor plan and Key plan layers, and make your Key plan layer the current editable layer.

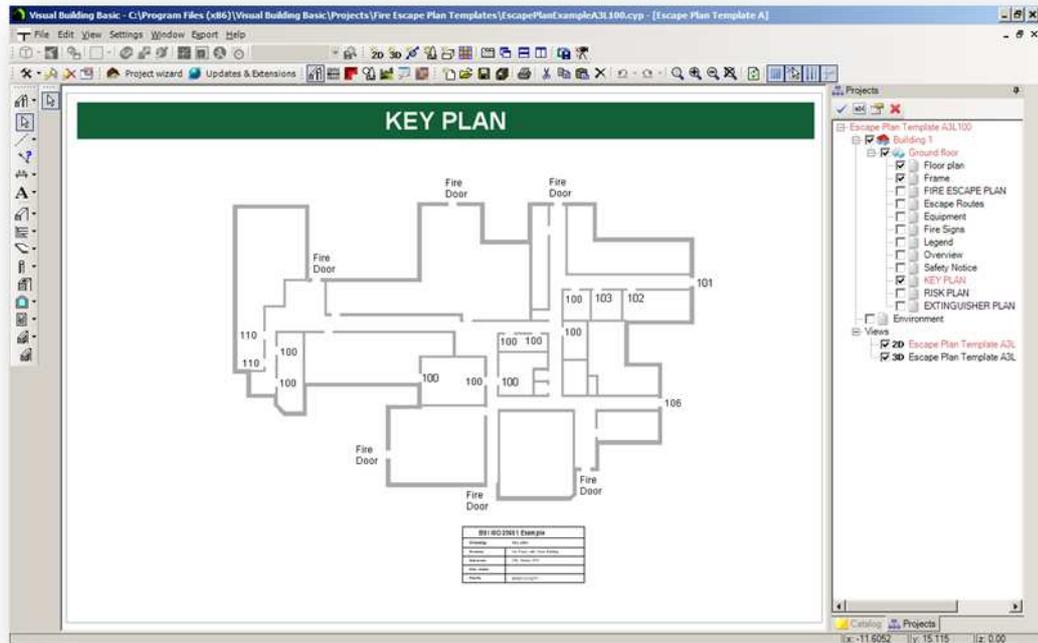
Select the Label icon from the **What toolbar** and then click the location on the plan when you would like to add the text. In the resulting dialog add the key number



You can change the font style and size by clicking the drop down list:

Once place text can be moved by selecting and dragging or editing by double clicking on it.

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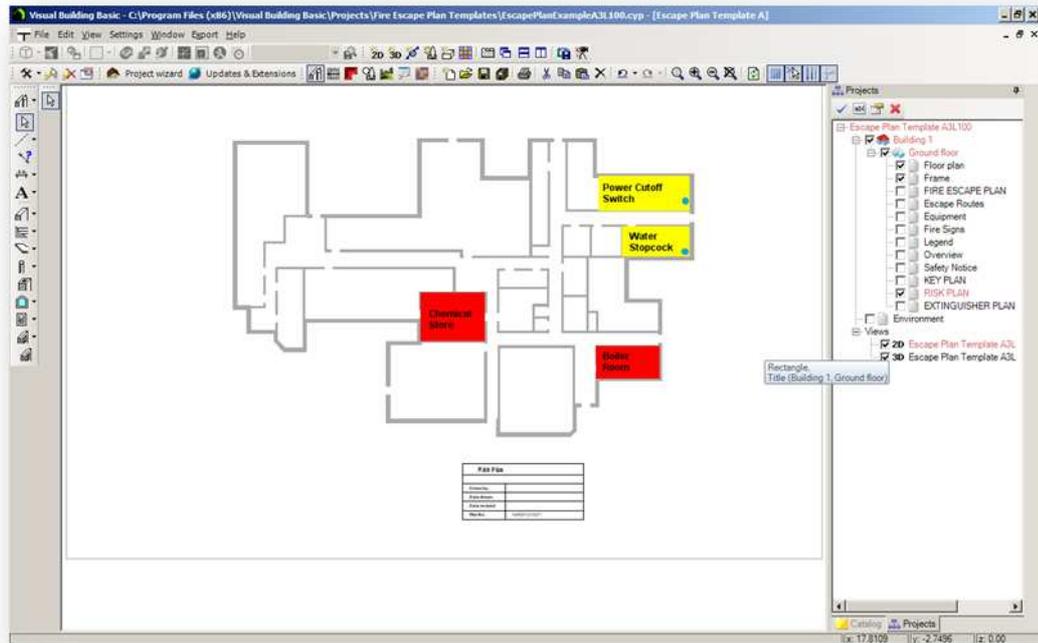
5.6.16 Create a Risk Plan

This is an optional feature and not needed to create a fire escape plan. However as you have created a floor plan for the purpose of a fire escape plan, you can now easily use that same plan to create a Risk Plan.

To create the Risk plan disable all layers except the Floor plan and Key plan layers, and make your Risk plan layer the current editable layer.

You can identify areas of risk using coloured area symbols to highlight the type of risk. Drag each colour from the Areas folder in the catalogue.

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5.6.17 Create an Extinguisher Plan

This is an optional feature and not needed to create a fire escape plan. However as you have created a floor plan for the purpose of a fire escape plan, you can now easily use that same plan to create an Extinguisher Plan.

To create the Extinguisher plan disable all layers except the Floor plan and Extinguisher plan layers, and make your Extinguisher plan layer the current editable layer.

6 Printing

Printers vary as how far to the edge of a sheet they can print and this is indicated by the size of the print area displayed when you print. We recommend that you print to a pdf file first, mainly because it's quicker and saves paper. When you have achieved what you want on the pdf file you can then print the pdf file to a printer. This can save a lot of time, a lot of paper and a lot of trees.

7 Creating your own symbols

The symbols supplied in the example catalogues are not exhaustive, but it is very easy to create your own catalogue of icons.

This same procedure also applies to the creation of new text labels for use as titles or within Action Plates.

Most images of symbols can be used. You can use .bmp, .jpg or a .png

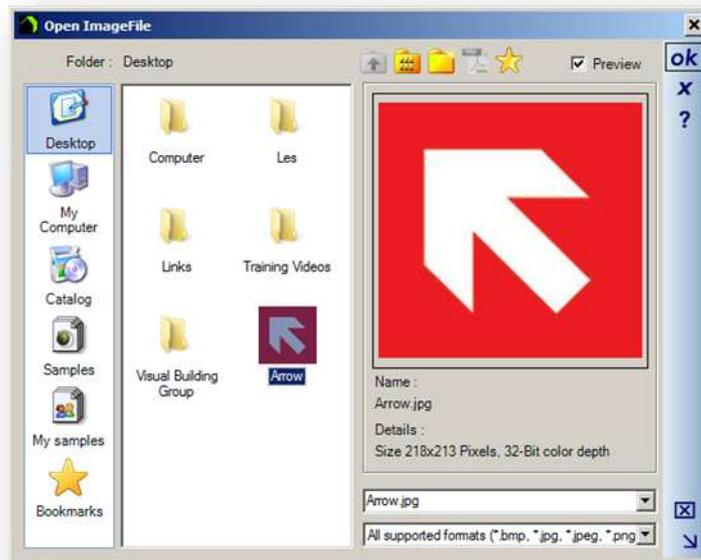
Create a blank new project, and select the 2D view as your current view. This step is not absolute necessarily because you can achieve the same result within any project, providing the 2D view is selected.

In the **What toolbar** select the 2D Graphic tool, which will then display the **Insert bitmap** tool:



Click on the Insert Bitmap tool to activate the Open Image file dialog, and navigate to the directory where you have saved your image. Select the image and the click on OK.

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The dialog will close and you will notice a small cross-hair attached to your cursor, indicating that you are about to place a graphic image within your 2D project. The first left mouse click will insert the first corner point of your graphic, and the second left mouse click will define the opposite corner of the rectangle. The size and shape of the rectangle is not important, as we will modify that in the next step.

Note the contents of the status bar informing you of status of each step.

Press the Esc key to cancel the insert graphic command.

Select the new graphic and right click on it to activate the context menu:



Select Properties in the context menu to activate the Image file properties dialog:

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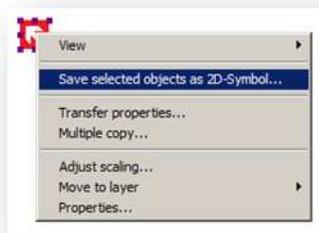
If your original graphic symbol was a square then set the height and width both to a size of 1m. If it was not a square then select the width to 1m then select Maintain aspect ratio.

In most cases we do not want a frame around the edge, so click on the **Outline** box to activate the **Line properties** dialog, where you can select the **Line type** to **invisible**.



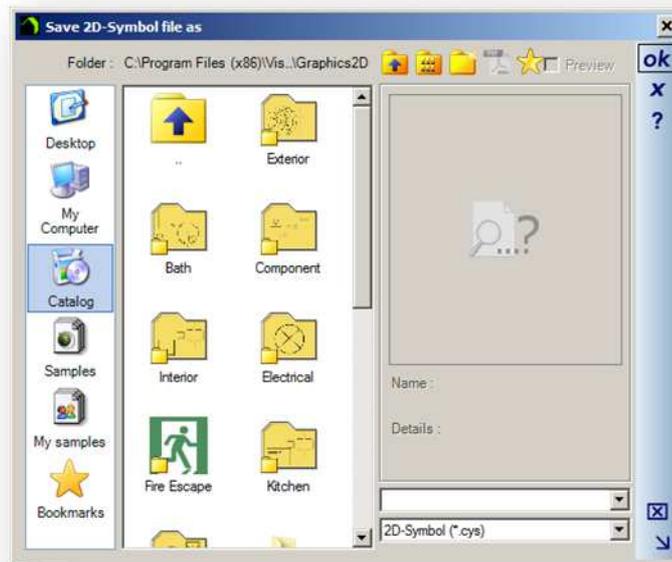
Click OK to close the Line properties dialog, and then click OK again to close the Image file properties dialog.

The image should still be select, if not then select it, and the right click on the image to activate the context menu again. This time select **Save selected Object as 2D Symbol**.



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This will activate the **Save 2D Symbol** dialog:



With this dialog you can navigate to Graphic2D folder and save the new symbol into your catalogue.

Refresh your catalogue directory by closing and opening a folder and your new 2D symbol will now appear. You can now drag this symbol into your 2D project view like any other 2D symbol.

Note that if you want to save the object into a UAC protected area you will need to have given Visual Building Administrator rights.

7.1 2D Objects v 2D Images

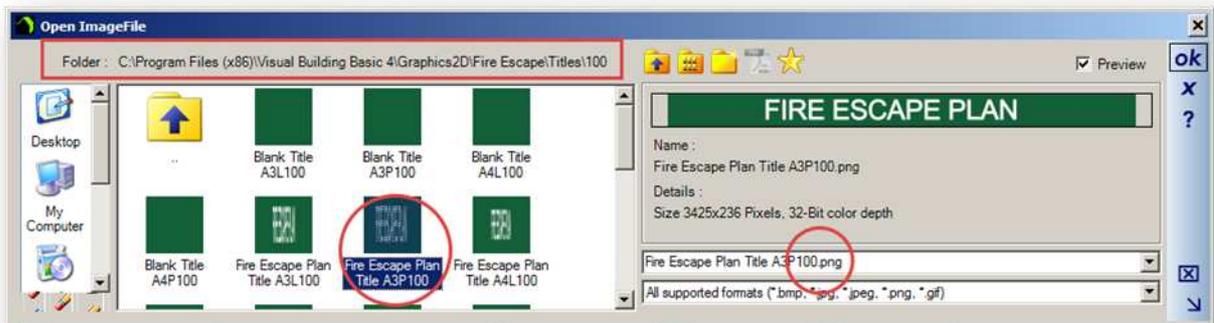
The 2D objects visible in the 2D Symbols folders are .cys files. This includes most of the files in the Fire Escape catalogue. These files are constructed using .png files, which are also located in the same folder as the .cys files, but are not visible in the 2D Symbols folder. To use view or use the .png files you must use the **2D Graphic – Insert Bitmap** tool.



We have included all the original .png files used to create the titles and Fire Action plates, so that you may construct and resize your own document titles and action plates..

You can locate these .png files to create new 2D .cys files by navigating to the Graphics2D/Fire Escape/Titles folder as below:

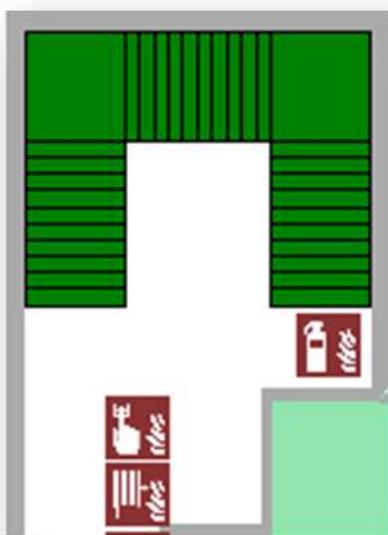
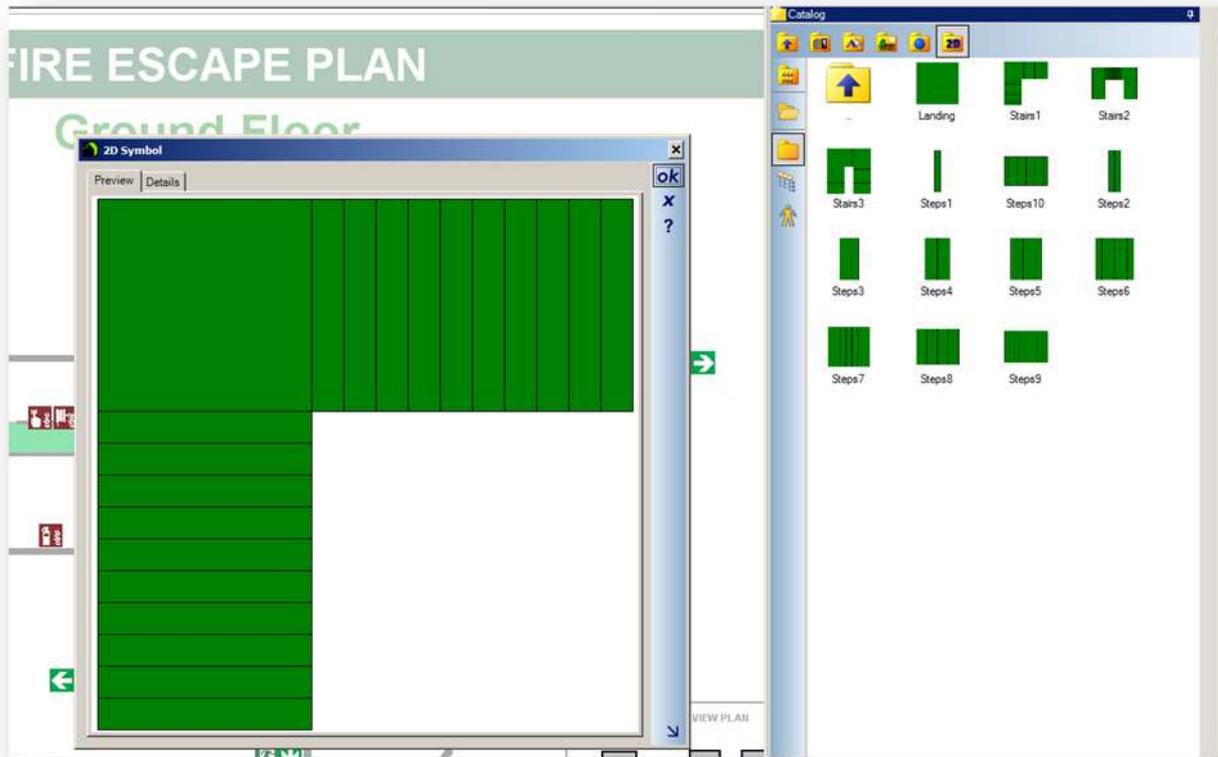
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If you want to add your own text, for example to include another language, then save the image of the text as a .png file and save in a folder in this path or create a new folder in the same path.

8 Stair Catalogue

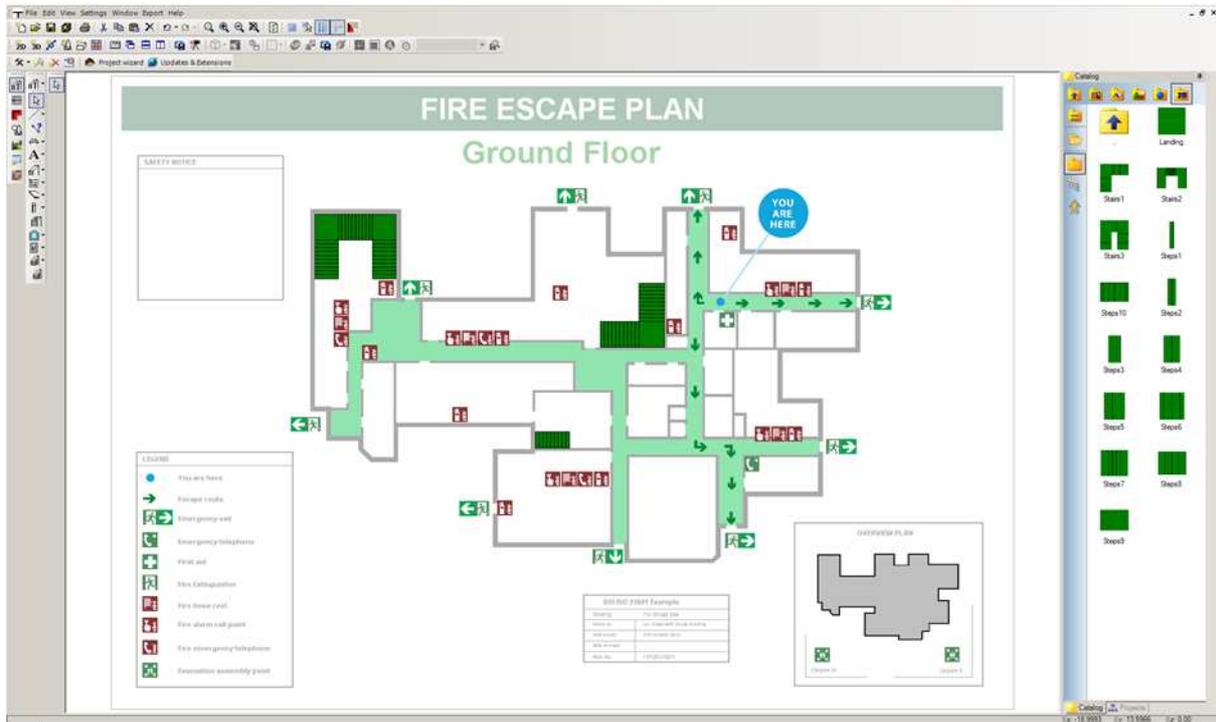
There is a Stair catalogue that contains some basic stair shapes. These can be dragged into your project and resized. Using the landing shape and the individual number of steps you can create any stair configuration.



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Don't be tempted to use the standard stair tool supplied with Visual Building to create your stair symbols. This tool is ideal for the representation of stair models in a 3D project and a 2D representation for an architect or builder. For a fire escape plan it is better to use an alternative 2D symbol. It is important that an escape stair way is recognisable and fortunately it is very easy to create the stair symbol to fit your plan.

The process to create a stair symbol is similar.

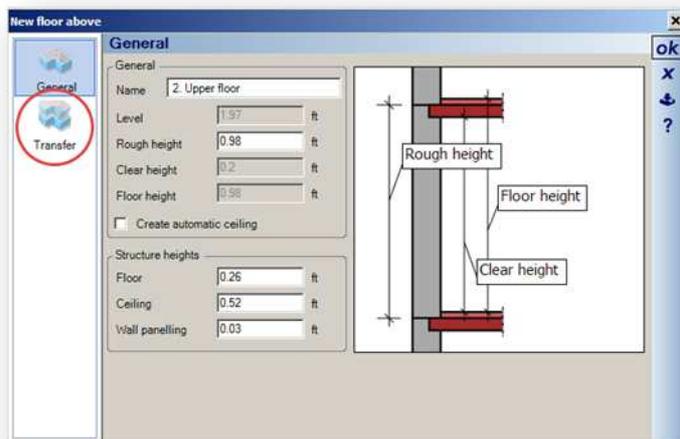
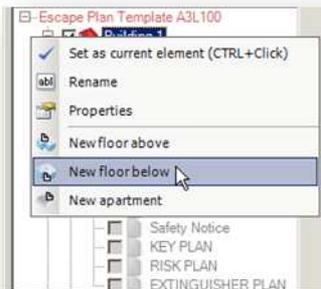


9 Multiple Floors

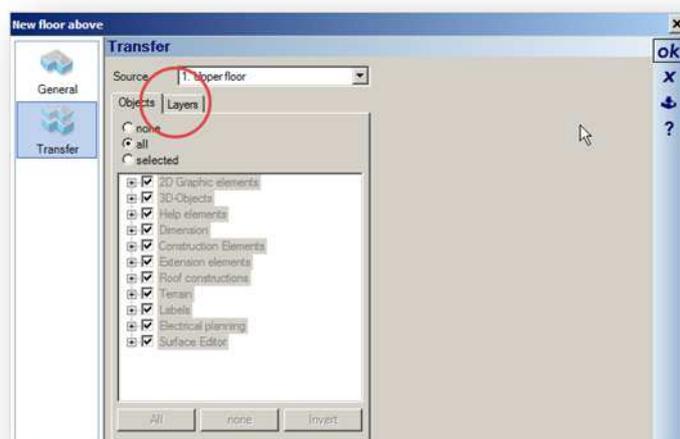
You can create multiple floors within a single project.

Create your ground floor plan as normal using one of the templates.

Then right click on the **Building** entry in the project tree, and from the context menu select **New Floor above**



On the activated New Floor above dialog click on the Transfer tab

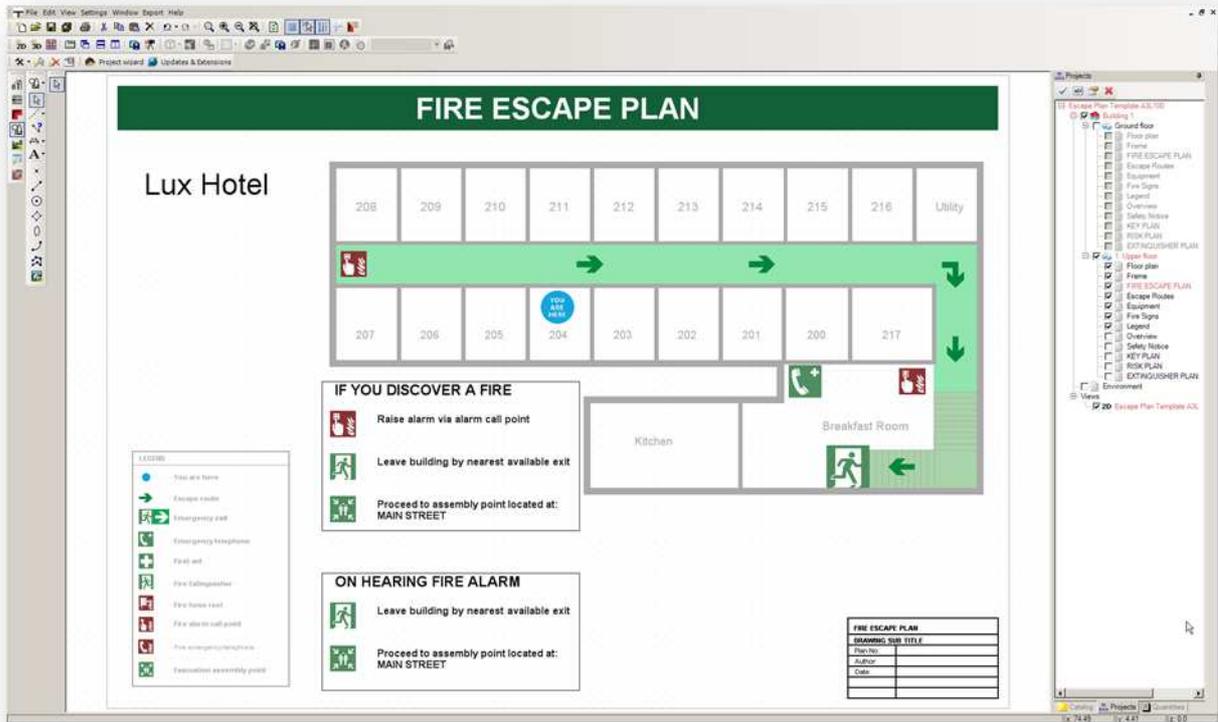


Now click on the Layers tab

You will note that all the layers from the template are selected. If you do not want any of these layers then you can deselect them and they will not be copied to the next floor.

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Any floor plan from the ground floor is the copied to the new floor.



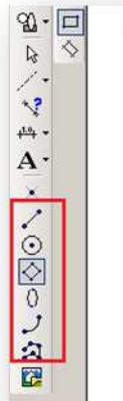
10 Creating your own Title Panels

Although there is a selection of title panels in the catalogue, you will more than likely need to create your own bespoke panels and save them for future use.



Create a blank new project, and select the 2D view as your current view. This step is not absolute necessarily because you can achieve the same result within any project, providing the 2D view is selected.

In the What toolbar select the 2D Graphic tool, which will then display the line tools tools:



Ensure that the grid is enabled and set to an appropriate value for the scale that you wish to work in. Ensure that snap is enabled.

With the Rectangle tool, draw the outline frame of your panel, snapping to the grid.

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Now draw any horizontal and vertical lines that you require. We use the grid to snap to in order to ensure horizontal and vertical lines.

You can move a line by clicking on its end point to select it and a second click will reposition it.



You can add text to the panel at this stage, but often it is desirable to create a blank frame without text.

Ensure that all lines are selected and group them together using the Group tool.

Right click on the group to activate the context menu and select Save selected Objects as 2D Symbol.

Save the object into your catalogue.

Refresh your catalogue directory by closing and opening a folder and your new 2D symbol will now appear. You can now drag this symbol into your 2D project view like any other 2D symbol.

Note that if you want to save the object into a UAC protected area you will need to have given Visual Building Administrator rights.

You will need to create a frame for different drawing scales.

11 Fire Action Plates

You will need to quickly convey information and actions to people reading your fire escape plans and this can be achieved by using Action Plates.



The content of an action plate depends upon the building use and features. For example in a hotel where there is no lift, it is pointless in advising the reader not to use the lift.

It is therefore for this reason that we need to be able to create any action plate to suit the circumstances.

When you have designed your action plate you can then save it to the catalogue for future use.

11.1 Creating an Action Plate

We will demonstrate how to create the above Action Plate for use in a Hotel Fire Escape Plan.

The Action Plate does not need to be created within the actual Fire Escape Plan, and is better created in a new project.

Create a New Project

Set the scale to: 1: 100 (Right click on 2D view and select Properties in context menu to display 2D view dialog, where you can set the scale.)

In the catalogue navigate to the Fire Escape / Action Plate:



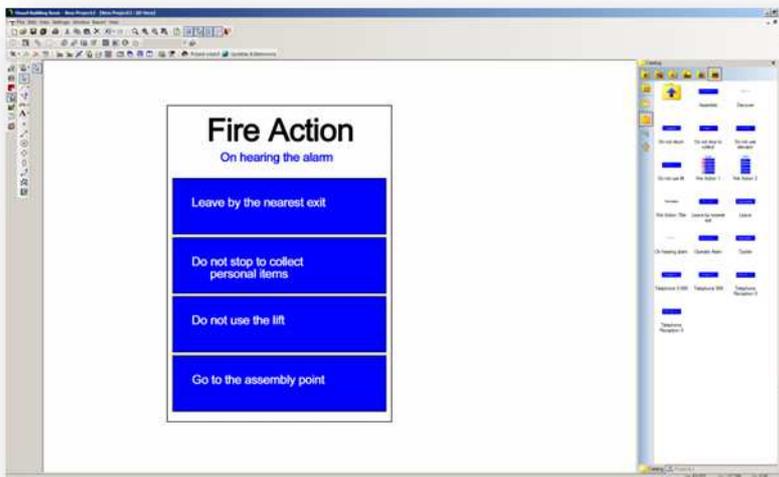
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Now select the **Hotel** folder

And a range of Action Plate text suitable for hotels will be displayed.

To view the contents of each text either double click on the catalogue entry or drag it into your 2D project window.



Drag several action text plates into your 2D project window.

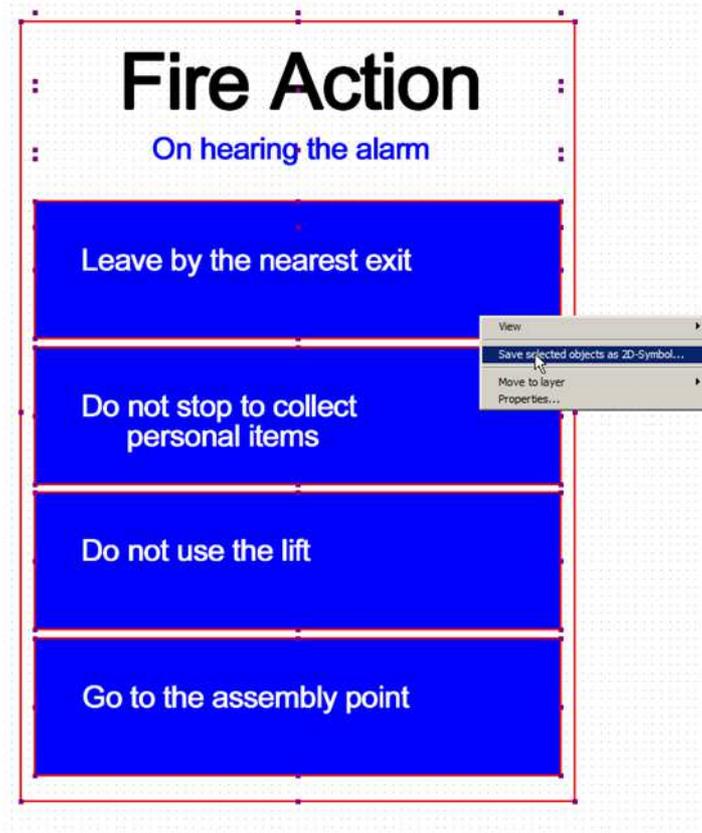
For alignment you can either enable the grid or construct some guide lines.

Use the 2D drawing tools to create a frame.

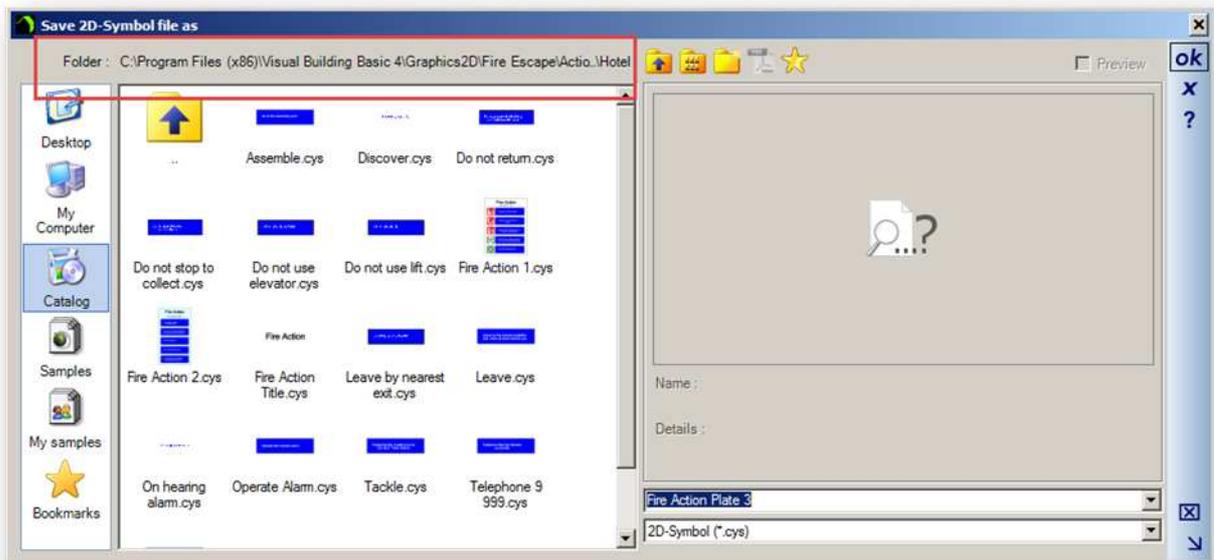
We will now save our new Action plate design to the catalogue as a 2D symbol.

To do this, drag a select box around the entire design and then right click to activate the context menu, from which you can select **Save selected objects as 2D Symbol**

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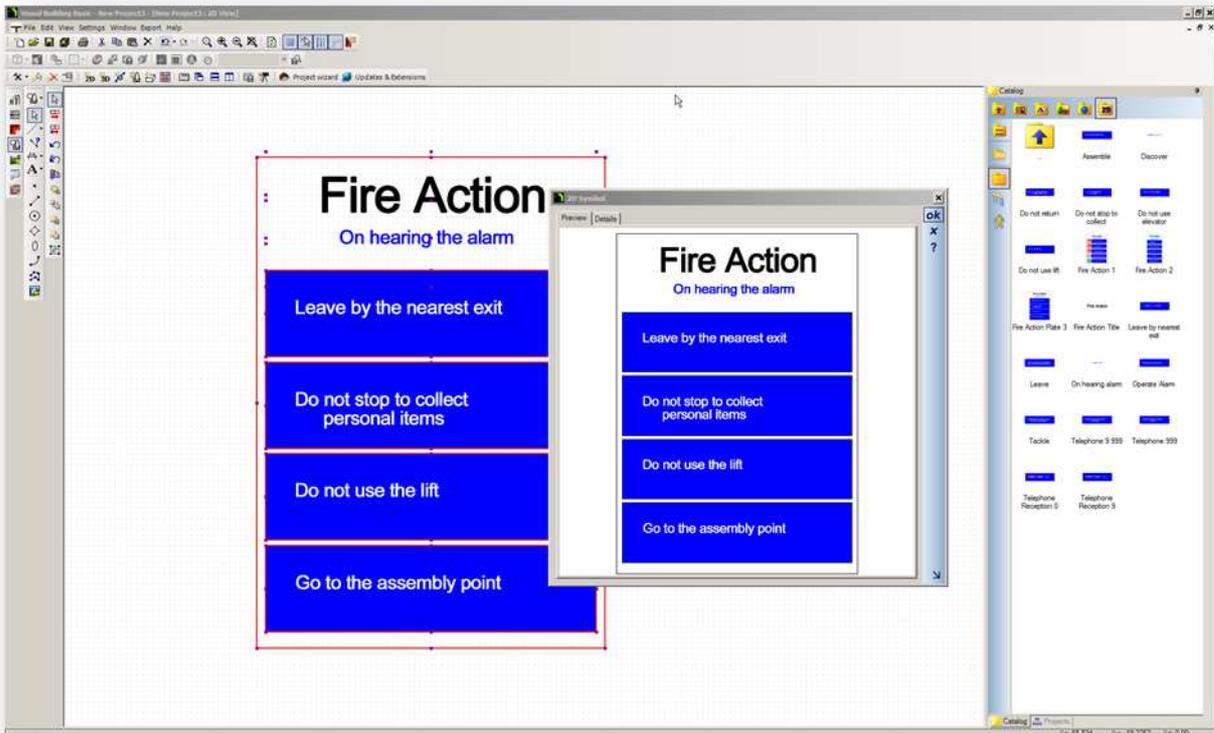
Take note of the file path you will need to navigate to so that your new 2D symbol appears in the catalogue. You must give Visual Building Administrator rights to allow you to save to this path.



Once saved in the catalogue as a 2D symbol, you cannot edit the 2D symbol again. If you want to edit the new action plate again, then save the project.

Refresh the catalogue view by closing and opening any folder) and your new Action Plate will appear in the catalogue.

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Let's edit the current action plate by adding some helpful icons.

You can import any 3D symbol in your catalogue.

Each imported 2D object can then be individually resized to suit the action plate you are creating.

As before, drag a select box around the entire design and then right click to activate the context menu, from which you can select **Save selected objects as 2D Symbol**

12 INDEMNITY

This document and associated software has been produced as a tool to assist you in completing various floor plans associated with a fire safety risk assessment of your premises. It is used entirely at your own risk to produce suitable plans, and also whether you consider the information therein to be suitable and sufficient. It is in no way exhaustive and Visual Building Ltd accepts no liability for any circumstances which may arise as a result of using this tool.

Fire safety and fire prevention are very important matters, and you should always consult with a qualified expert concerning the appropriate requirements and use of any safety signs.